TECHNICAL DATA SHEET

Repsol Isplen® RC590S2M

REPSOL ISPLEN RC590S2M is a phthalate free polypropylene random copolymer that belongs to a range of a highly transparent family specially designed to satisfy the more exigent necessities of the market.

- It allows reducing the cycle time, due to its higher crystallization temperature.
- By its higher stiffness, it increases the mechanical properties of the articles manufactured. Higher dimensional stability.
- Due to the improved optical properties, it is possible to produce articles of higher thickness, maintaining a very good aesthetic result. The haze of this product in a 2 mm plate is equivalent to the haze of a standard random copolymer in a 1 mm plate.

Applications:

REPSOL ISPLEN RC590S2M is specially indicated for applications where the optical properties are really demanding, and in addition is necessary a good processability:

- Thick houseware containers (square and cylindrical shape).
- Transparent boxes and crates for domestic and professional storage.
- Aesthetics transparent components with thick walls.
- Caps and closures (cosmetics, dispensers, houseware, ...)

Recommended melt temperature range from 190 to 250ºC. Processing conditions should be optimised for each production line.

Properties:

Properties	Value	Unit	Test Method
General			
Melt Flow Rate (230ºC/2.16 kg)	35	g/10 min	ISO 1133
Density at 23ºC	905	kg/m^3	ISO 1183
Mechanical			
Flexural Modulus of Elasticity	1050	MPa	ISO 178
Charpy Impact Strength (23 ºC, notched)	5	kJ/m^2	ISO 179
Optical			
Haze (1 mm)	7	%	ASTM D 1003

This information is offered in good faith and meant only as a guide. The transformer or user will be, in each case, responsible for the processing conditions and the final use of the product. Freedom under patents, copyright and registered designs cannot be assumed.

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Storage:

REPSOL ISPLEN RC590S2M should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 60ºC and protected from UV radiation. Storage under inappropriate conditions could initiate degradation processes or undesired migration of additives included in its formulation which may have a negative influence on the processability and properties of the transformed product.

Disclaimer:

This grade complies with the European regulations for materials for use in food contact. This grade is not intended to be used in medical, pharmaceutical, or healthcare applications, therefore Repsol does not authorize its use in them.

Repsol does not grant express or implicit guarantees that extend beyond the description contained herein. Nothing herein shall constitute any guarantee of merchantability or fitness for a particular purpose. Before using a product sold by Repsol, users must make their own independent determination that the product is safe, legal, and technically suitable for its intended use. Repsol does not assume any responsibility for the use of its materials together with other materials.

Related documents:

The following related documents are available on request, and represent various aspects on the usability and safety of the product:

- Safety data sheet.
- Statement on compliance with food contact regulations.

Recommended consumption period: 12 months from the date of delivery to the customer.

July 2026

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